



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
POHB044742



Supplier: MES002-VC
Métaux Solutions
2625 boul Jacques-Cartier Est
Longueuil
QC
J4N 1L7 Canada
Phone: 800 558 8858
Fax: 514 633 8044

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No:	POHB044742
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PO Date: 10/9/19

Due Date: 10/18/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
Phone: 613-623-5200 Ext: 242
Fax: 613-632-1053
clavoie@dartaero.com

Via: Ground

Pymt Terms: Net 60

Freight Terms:**Special Comments:**

OCT 10 2019

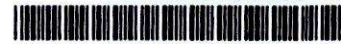
Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		M4130NT0.500W.083		4130 Round Tube .500 X .083W : MATERIAL: AISI 4130N STEEL TUBING AS PER MIL-T-6736 OR AMS 6371/6360/6361/6362 6373/6374 receive ft	Firmed	-	10/18/19	60 ft	55.5 ft Van	0 ft 60 ft	\$14.85/ft	\$891.00
												OCT 28 2019
2		MT-4140QT-R1.000		AISI 4140 Quenched & Tempered Steel Round Bar 1.000" Dia. : MATERIAL: AISI 4140 ROUND BAR MINIMUM ROCKWELL C = 28 RC MAXIMUM ROCKWELL C = 32 RC (SAME AS QT & HT) SPECIFICATION: ASTM A 29, ASTM A 434 CLASS BC/BD, MIL-S-24093 TYPE 2 PC=29.5	Firmed	-	10/18/19	12 ft	12 ft Van	0 ft 12 ft	\$6.25/ft	\$75.00
												OCT 28 2019



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER POHB044742



Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3		MT-4140QT-R3.500		AISI 4140 Quenched & Tempered Steel Round Bar 3.500" Dia. : MATERIAL: AISI 4140 ROUND BAR MINIMUM ROCKWELL C = 28 RC MAXIMUM ROCKWELL C = 32 RC (SAME AS QT & HT) SPECIFICATION: ASTM A 29, ASTM A 434 CLASS BC/BD, MIL-S-24093 TYPE 2	Firmed	-	10/18/19	12 ft	11.5 ft 0 ft VM	12 ft	\$79.45/ft	\$953.40
OCT 2 8 2019												
Line Item Note 2 PCS OF 6 FT												
4		M6061T6S.125		6061-T6 .125 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	-	10/18/19	64 sf	64 sf 0 sf VM	64 sf	\$12.54375/sf	\$802.80
OCT 2 8 2019												
5		M6061T6S.080	AS08061	6061-T6 .080 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	-	10/18/19	192 sf	192 sf 0 sf VM	192 sf	\$7.9364583/sf	\$1,523.80
OCT 2 8 2019												
6		MT-HRS-S-16GA		Hot Rolled Steel Sheet 16 Gauge 0.0625" MATERIAL: HOT ROLLED STEEL SHEET ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018	Firmed	-	10/18/19	32 sf	32 sf 0 sf VM	32 sf	\$3.80/sf	\$121.60
OCT 2 8 2019												
7		M304S18GA	SS182B4	304/316 .050 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed	-	10/18/19	160 sf	160 sf 0 sf VM	160 sf	\$6.334375/sf	\$1,013.50
OCT 2 8 2019												

OCT 28 2019

OCT 28 2019

OCT 28 2019

OCT 28 2019

OCT 28 2019



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Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB044742**



Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
8		M304B0.250x0.500		304 Bar .250 X .500 : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	10/18/19	200 ft	200 ft	200 ft	\$4.25/ft	\$850.00
9		MSTEEL-A2-B0.500X1.250		AISI A2 Tool Steel Bar, 0.500 X 1.250 : MATERIAL: AISI A2 STEEL, ANNEALED CONDITION AS PER ASTM A681 receive ft	Firmed	-	10/18/19	60 ft	0 ft	60 ft	\$15.99/ft	\$959.40
											Grand Total: \$7,190.50	

OCT 28 2019

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable). No Raw Metals from China or Soviet Bloc Countries. (DFARS)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program.

A049 supplier awareness.

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/9/19 1:15 PM Dart.Lavoie.Chantal

Shipping Order

31/10/2019

METAUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7 Tel : 450 641-3330

Order : 147671
Reference : pohb044742
Ship : PICK UP / PICK UP

Customer: 6323336

Ship To

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
DT12083	4130n TUB .500" X .083" WALL 3 x 20' r/l **** ht;25537 Vm			
MR141H	4140 HTSR ROU 1.000 DIA 1 x 12' ht;75067288 Vm			
MR31241H	4140 HTSR ROU 3.500 DIA 2 X 67.75" ht;74110209 Vm			
AS1861	ALU SHE .126 6061-T 6 2 x 4' x 8' ***** ht;569424 Vm			
AS08061	ALU SHE .080 6061-T6 (12G) 4 x 4' x 12' ***** ht;400871 Vm			
HS16G	MS SHE 16G HOT ROLL (.062) 1 x 4' x 8' ht;0615g4-52 Vm			
SS182B4	304 SHEET .048 (18G) 5 x 4' x 8' ***** ht;lz26sa08 Vm			
SF14124	304 FLA .250 X .500 16 x 12' r/l			

*** Continued on Next Page ***

Order 10/10/2019 147671

METAUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7 Tel. : 450 641-3330

Sales Rep. : JEROME PRIMEAU
Reference : pohb044742
Expiration Date : 08/01/2020

Customer: 6323336

Ship To :

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Same

Fax: 613 632-1053

Item No.	Description	Ord	Inv.	B/O Qty	Price	Total	Tx
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N						
DT12083	4130n TUB .500" X .083" WALL 3 x 20' r/l **** ht;25537	55.24	55.24	0	14.85	820.31	A
MR141H	4140 HTSR ROU 1.000 DIA 1 x 12' ht;75085250	12	12	0	6.25	75.00	A
MR31241H	4140 HTSR ROU 3.500 DIA 2 X 67.75" ht;74110209	11.29	11.29	0	79.45	896.99	A
AS1861	ALU SHE .126 6061-T 6 2 x 4' x 8' ***** ht;569424	64	64	0	12.54	802.56	A
AS08061	ALU SHE .080 6061-T6 (12G) 4 x 4' x 12' ***** ht;400871	192	192	0	7.94	1 524.48	A
HS16G	MS SHE 16G HOT ROLL (.062) 1 x 4' x 8' ht;0615g4-52	32	32	0	3.80	121.60	A
SS182B4	304 SHEET .048 (18G) 5 x 4' x 8' ***** ht;lz26sa08	160	160	0	6.33	1 012.80	A
SF14124	304 FLA .250 X .500 16 x 12' r/l ht;56161555	200	200	0	4.25	850.00	A
TP12A2	A-2 PLATE TFA 1/2" THICK	165	0	165	6.50	1 072.50	A

Wrong HT; corrected!

VM

*** Continued on Next Page ***

Order 10/10/2019 147671

METAUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7 Tel. : 450 641-3330

Sales Rep. : JEROME PRIMEAU
Reference : pohb044742
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Customer : 6323336

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Ship To :

Same

Fax: 613 632-1053

Item No.	Description	Ord	Inv.	B/O Qty	Price	Total	Tx
	5 x 1.250" -0+.125" x 144" r/l						
	ht;						
	livre						
	jp						

COPY Subtotal : 7 176.24

A) Regist : HST : 932.91

To be Invoiced	1 211.93	Total :	8 109.15
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CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 01 of 02

Certification Date
17-OCT-2019

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Invoice Number
T397416

47838-J

PART NUMBER/NUMÉRO DE PIÈCE

140811

SOLD TO: METAUX SOLUTIONS INC.
VENDU À:

SHIP TO:
EXPÉDIÉ À:

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 4130 CDS TUBING AMS T 6736 COND N;
.500 OD X .083 W (.334 ID) X 17/24' R/L Line Total: 56.2746 FT
HEAT: 25537 ITEM: 140811

Specifications:

AMS T 6736 B*

*COND N

FAR 52.225-5

AMS 2640 J

MIL T 6736 B*

FAR 52.225-1

ASTM A450

ASTM E1444

AMS 6360 P

DFARS 252.225-7001

ASTM E112

CHEMICAL ANALYSIS

C	MN	P	S	SI	AL	CR	MO
0.30	0.56	0.008	0.005	0.29	0.025	1.02	0.20
NI	PB	CU	V	TI	SN		
0.13	0.00	0.18	0.0090	0.003	0.0090		

RCPT: R666387

COUNTRY OF ORIGIN : USA

MECHANICAL PROPERTIES

	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
DESCRIPTION	KSI	KSI	IN 02 IN	IN AREA	RC
	97.459	104.779	18.0		33

GRAIN SIZE : 7 -

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The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JAMES MURPHY

MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date
17-OCT-2019

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

47838-J

Invoice Number
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VENDU À:

SHIP TO:
EXPÉDIÉ À:

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 4130 CDS TUBING AMS T 6736 COND N;
.500 OD X .083 W (.334 ID) X 17/24' R/L Line Total: 56.2746 FT
HEAT: 25537 ITEM: 140811

MATERIAL IS FREE FROM MERCURY CONTAMINATION
EDDY CURRENT: YES
DECARB: OK
AMS NO : 2301
SEVERITY : 0.0
FREQUENCY: 0.0

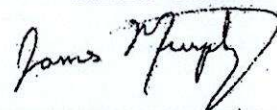
COMMENTS

melt source: timken steel - melt/mfg. usa

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Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JAMES MURPHY



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

Line 1

M4130NT0.500W.083

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 4130N SEAMLESS STEEL TUBING

SPECIFICATION: MIL-T-6736 OR AMS 6371, 6360, 6361, 6362, 6373, 6374

PART NUMBER: M4130N | D.DDD | W.TTT |
DIA. | WALL

WHERE: "D.DDD" = OUTER DIAMETER (IN INCHES)
AND "W.TTT" = WALL THICKNESS (IN INCHES)

EG. 3/4" TUBING WITH .035" WALL = M4130NT0.750W.035

RELEASE
2012-04-16

B	REFORMAT DWG TO ACCOMODATE ADDITIONAL TUBE DIAMETERS AND WALL THICKNESS	RP	12.04.02
A	NEW ISSUE	JB	01.05.16
REV.	DESCRIPTION	BY	DATE
DESIGN	JB	DART AEROSPACE LTD	
DRAWN	RP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. B
MFG. APPR.	SW	M4130N-T	SHEET 1 OF 1
APPROVED	SW	TITLE	SCALE
DE APPR.	SW	STEEL TUBING	NTS
DATE	12.04.02	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PROPRIETARY AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4130NT0.500W.083 PO / BATCH NO: POHB044742/
 DATE: OCT 29 2019 S227401

MATERIAL CERT REC'D: Yes THICKNESS ORDERED: .5"0
 QUANTITY RECEIVED: 50 ft THICKNESS RECEIVED: .5"0
 QUANTITY INSPECTED: 50 ft SHEET SIZE ORDERED: -
 QUANTITY REJECTED: - SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y ☒ N ☐	
CORRECT FINISH	☒ Y ☐ N	
CORROSION	Y ☒ N ☐	
CORRECT GRAIN DIRECTION	☒ Y ☐ N	
CORRECT MATERIAL PER M-DRAWING	☒ Y ☐ N	<u>MILT 6736</u>
CORRECT THICKNESS	☒ Y ☐ N	
PHOTO REQUIRED	Y ☒ N ☐	
CORRECT REF # TO LINK CERT	☒ Y ☐ N	<u>HT:25537</u>
CORRECT MATERIAL IDENTIFICATION	☒ Y ☐ N	
CORRECT M# ON THE MATERIAL	☒ Y ☐ N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y ☒ N ☐	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y ☒ N ☐	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: _____ DATE: <u>OCT 29 2019</u>	DAS 81 9-89	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 01 of 02

Certification Date
28-NOV-2018

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

45926-M

Invoice Number
T386504

PART NUMBER/NUMÉRO DE PIÈCE

506425

SOLD TO: METAUX SOLUTIONS INC.
VENDU À:

SHIP TO:
EXPÉDIÉ À:

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 4140/4142 HR HT BAR STRESS FREE 269/321 BHN
1 RD X 20" R/L Line Total: 470.448 LB
HEAT: 75067288 ITEM: 506425

Specifications:

ASTM A193 GR B7 16

MIC 12016 ADD 1 16

ASTM E10 15

ASTM A304 16

ASTM E8 16

ASTM A434/A434M BC 17

ASTM A434 GR BC

JDM AO QL2 7/96

MIC 12016 ADD 1 16

ASTM E381 01

CAT 1E0024

ASTM A322 13

ASME SA193 GR B7

ASTM E112 13

ASTM A255 10

ASTM A370 17

ASTM A29/29M 16

ASTM A962 SEC 5 14

CHEMICAL ANALYSIS

C	MN	P	S	SI	NI	CR	MO
0.41	0.89	0.013	0.029	0.24	0.11	0.91	0.18
CU	SN	AL	V	CA	NB	H	
0.24	0.0090	0.026	0.002	0.0007	0.002	1.20	

RCPT: R499578

COUNTRY OF ORIGIN : USA

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR KSI	ULT TEN KSI	%ELONG IN 02 IN	%RED IN AREA	HARDNESS BHN
	134.0	148.0	23.0	57.0	289

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Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date
28-NOV-2018

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

45926-M

Invoice Number
T386504

PART NUMBER/NUMÉRO DE PIÈCE

506425

SOLD TO: METAUX SOLUTIONS INC.
VENDU À:

SHIP TO:
EXPÉDIÉ À:

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 4140/4142 HR HT BAR STRESS FREE 269/321 BHN
1 RD X 20' R/L Line Total: 470.448 LB

HEAT: 75067288

ITEM: 506425

END-QUENCH HARDENABILITY (JOMINY - RC)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
57	57	57	57	57	57	56	55	54	52	51	50	49	48	47
16	18	20	22	24	26	28	30	32						
46	45	44	44	42	42	40	40	38						

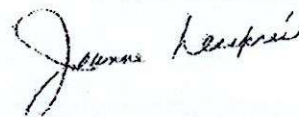
IDEAL DIAMETER : 5.26 IN GRAIN SIZE : 5 - 8

REDUCTION RATIO 86.7 TO 1 MATERIAL IS FREE FROM MERCURY CONTAMINATION
NO WELD REPAIR PERFORMED ON MATERIAL
THERMAL TREATMENT: OK
AUST 1630°F/ 0.60 MIN
QUENCH 95°F/ 0.20 MIN MEDIA: WATER
TEMPER 1395°F/ 0.60 MIN
MACRO: OK
MICRO1: OK

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JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

Line 2

MT-4140QT-R1.000

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 4140 ROUND BAR
MINIMUM ROCKWELL C = 28 RC
MAXIMUM ROCKWELL C = 32 RC
(SAME AS QT & HT) *RC 29.5 um.*

SPECIFICATION: ASTM A 29, ASTM A 434 CLASS BC/BD, MIL-S-24093 TYPE 2

TOLERANCES: TOLERANCES PER APPLICABLE LISTED SPECIFICATIONS

PART NUMBER: MT-4140-R[D.DDD]

WHERE "D.DDD" IS THE DIAMETER IN INCHES

EXAMPLE: 4" ROUND BAR = MT-4140-R-4.000

C	REMOVED ASTM A193-B7, AMS 6349, AMS 6362, AMS 6529, MIL-S-5626, ADDED MIL-S-24093 TYPE 2	19-584	KPT
B	MIN/MAX Rc UPDATED, ADDED NOTE FOR HT/QT, ADDED ASTM A434-BC/BD, ASTM A193-B7 AND MIL-S-5626	18-524	KK
A	NEW ISSUE	17-790	VM
REV.	DESCRIPTION	ECN #	BY
DESIGN	VM	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	KPT		
CHECKED	MBB	TOOL PART #	REV. C
MFG. APPR.	DD	MT-4140-R	SHEET 1 OF 1
APPROVED	<i>VM</i>	TITLE	SCALE
		AISI 4140 ROUND BAR	NTS
DATE	2/14/2019	COPYRIGHT © 2019 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-414007-EL000

PO / BATCH NO.: POHBO4742/

DATE: OCT 25 2019

5226725

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 1" 0

QUANTITY RECEIVED: 12 ft

THICKNESS RECEIVED: 1" 0

QUANTITY INSPECTED: 12 ft

SHEET SIZE ORDERED: -

QUANTITY REJECTED: -

SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y ☒ N	
CORRECT FINISH	Y ☒ N	
CORROSION	Y ☒ N	
CORRECT GRAIN DIRECTION	Y ☒ N	ASTM A439
CORRECT MATERIAL PER M-DRAWING	Y ☒ N	
CORRECT THICKNESS	Y ☒ N	
PHOTO REQUIRED	Y ☒ N	
CORRECT REF # TO LINK CERT	Y ☒ N	HT: 75067288
CORRECT MATERIAL IDENTIFICATION	Y ☒ N	
CORRECT M# ON THE MATERIAL	Y ☒ N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y ☒ N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y ☒ N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: _____	SIGNED OFF BY: _____
DATE: <u>OCT 25 2019</u>	DATE: _____

DAS
81
9-80

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 01 of 02

Certification Date
16-JUL-2019

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

47374-J
PART NUMBER/NUMÉRO DE PIÈCE
506444

Invoice Number
S722429

SOLD TO: METAUX SOLUTIONS INC.	SHIP TO: METAUX SOLUTIONS (RIVE-SUD)
VENDU À: 2625 BOUL JACQUES CARTIER EST	EXPÉDIÉ À: 2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7	LONGUEUIL QC J4N 1

Description: 4140/4142 HR HT BAR STRESS FREE 269/321 BHN
3-1/2 RD X 17'4.0" (208.0") REMNANT Line Total: 567.4 LB
HEAT: 74110209 ITEM: 506444

Specifications:

ASTM A193 GR B7	ASTM A434 GR BC 17	ASME SA193 GR B7
ASTM A29 16	MIC 12016 ADD 1 16	ASTM E112
ASTM A304	ASTM E381	ASTM A370
SPEC 1E38	ASTM A322 13	EN 10204 3.1B
JDM AO QL2 4/17	ASTM A193/A193M B7 16	

CHEMICAL ANALYSIS

C	MN	P	S	SI	NI	CR	MO
0.40	0.87	0.012	0.022	0.21	0.10	0.97	0.16
CU	SN	AL	V	NB	B	CA	N
0.28	0.011	0.028	0.004	0.002	0.0004	0.0012	0.0072

RCPT: R694066

COUNTRY OF ORIGIN : USA

MECHANICAL PROPERTIES

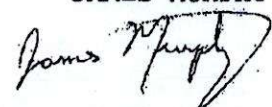
DESCRIPTION	YLD STR KSI	ULT TEN KSI	%ELONG IN 02 IN	%RED IN AREA	HARDNESS BHN
	106.0	128.0	21.0	62.0	284

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mencionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JAMES MURPHY



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date
16-JUL-2019

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Invoice Number
S722429

47374-J
PART NUMBER/NUMÉRO DE PIÈCE
506444

SOLD TO: METAUX SOLUTIONS INC.
VENDU À:

SHIP TO:
EXPÉDIÉ À:

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 4140/4142 HR HT BAR STRESS FREE 269/321 BHN
3-1/2 RD X 17'4.0" (208.0") REMNANT Line Total: 567.4 LB
HEAT: 74110209 ITEM: 506444
END-QUENCH HARDENABILITY (JOMINY - RC)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
56	56	56	56	56	56	54	53	52	50	49	48	47	46	44
16	18	20	22	24	26	28	30	32						
43	43	42	42	40	38	37	37	36						

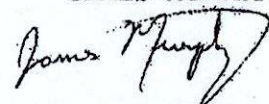
IDEAL DIAMETER : 5.041 IN GRAIN SIZE : 7 -

STRAND CAST REDUCTION RATIO 7.5 TO 1
MATERIAL IS FREE FROM MERCURY CONTAMINATION
NO WELD REPAIR PERFORMED ON MATERIAL
ULTRASONIC: YES
THERMAL TREATMENT: OK
AUST 1600°F/TIME 123.00 MIN
QUENCH 100°F/ MEDIA: WATER
TEMPER 1150°F/TIME 186.00 MIN
MACRO: OK
MICRO1: OK

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.
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Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JAMES MURPHY



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

Line 3

MT-4140QT-R3.500

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 4140 ROUND BAR
MINIMUM ROCKWELL C = 28 RC
MAXIMUM ROCKWELL C = 32 RC
(SAME AS QT & HT) *VM*

SPECIFICATION: ASTM A 29, ASTM A 434 CLASS BC/BD, MIL-S-24093 TYPE 2

TOLERANCES: TOLERANCES PER APPLICABLE LISTED SPECIFICATIONS

PART NUMBER: MT-4140-R-[D.DDD]

WHERE "D.DDD" IS THE DIAMETER IN INCHES

EXAMPLE: 4" ROUND BAR = MT-4140-R-4.000

C	REMOVED ASTM A193-B7, AMS 6349, AMS 6382, AMS 6529, MIL-S-5626. ADDED MIL-S-24093 TYPE 2	19-584	KPT
B	MIN/MAX Rc UPDATED, ADDED NOTE FOR HT/QT, ADDED ASTM A434-BC/BD, ASTM A193-B7 AND MIL-S-5626	18-524	KK
A	NEW ISSUE	17-790	VM
REV.	DESCRIPTION	ECN #	BY
DESIGN	VM	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	KPT		
CHECKED	MBB	TOOL PART #	REV. C
MFG. APPR.	DD	MT-4140-R	SHEET 1 OF 1
APPROVED	<i>VM</i>	TITLE	SCALE
		AISI 4140 ROUND BAR	NTS
DATE 2/14/2019			
COPYRIGHT © 2019 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-414007-R3-500 PO / BATCH NO.: POH3044742 / 5227402
 DATE: OCT 29 2019

MATERIAL CERT REC'D: Yes THICKNESS ORDERED: 3.5" 0
 QUANTITY RECEIVED: 12 ft THICKNESS RECEIVED: 3.5" 0
 QUANTITY INSPECTED: 12 ft SHEET SIZE ORDERED: -
 QUANTITY REJECTED: - SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y ☒ N	
CORRECT FINISH	☒ Y N	
CORROSION	Y ☒ N	
CORRECT GRAIN DIRECTION	☒ Y N	
CORRECT MATERIAL PER M-DRAWING	☒ Y N	ASTM A29
CORRECT THICKNESS	☒ Y N	
PHOTO REQUIRED	Y ☒ N	
CORRECT REF # TO LINK CERT	☒ Y N	NT: 74110209
CORRECT MATERIAL IDENTIFICATION	☒ Y N	
CORRECT M# ON THE MATERIAL	☒ Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y ☒ N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y ☒ N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: _____	DAS 81 9-89	SIGNED OFF BY: _____	
DATE: <u>OCT 29 2019</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

CERTIFIED INSPECTION REPORT

Arconic

DAVENPORT WORKS 4879 State Street Bettendorf, IA 52722

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

This test report shall not be reproduced except in full, without the written approval of the Quality Department. No alteration, addition or other change is authorized to be made to this certificate. The recording of false, fictitious, or otherwise fraudulent statements or entries on this certificate by any recipient may be punished as a felony under applicable law.

Per:

S. Nandak
Nandu Srinivasan
Manufacturing Director - Davenport & Satellite

Terrence Thom
Terrence Thom
Quality Assurance Manager

3707172	0			
Ship Date	B.L. No.	Invoice No.	Arconic No.	Item
2019-02-08	11988480	00000	1001077092-1	DPE-77092-1
P.O. No./Govt Contract No.	Customer	Arconic	Item	
U11023	Ln#: 1		1	GB8

Page 1 of 2

Ship To:

Item Description
0.125 IN TK (+.0055 -.0055) X 48.0 IN W (+.046875 -.046875) (N) A/T 6061
T6 COILED SHEET MILLS FINISH. AMS4027 REV N ASME-SB-
209 REV 15 ASTM209 REV 14 ((NOT
MARKED)) SUBSTANTIALLY FREE FROM OIL KRAFT PAPER
INTERLEAVED COIL SIZES: ID 20 IN HORIZONTAL
AXIS COIL WGTS: MIN 4000 LB MAX 9500 LB
MAX GROSS SKID WGT: 10000 LB QUAN TOL +/-
25 % CQR 0266235 REV 01 CUST REQ 19-01-
20 *** W/B 19-02-02 ***

Num	Package Ticket	Lot	Weight	Quantity	UOM	Inspector Clock Numbers
1	557176	569424	8742	1	PC	27767 47300 D043948
2	557180	569424	6373	1	PC	27767 47300 D043999
			15115	2		

Notes for CQR: 0266235.1

PRODUCT PRODUCED TO THE REQUIREMENTS OF AMS4027 REV N ALSO MEET THE REQUIREMENTS OF AMS-QQ-A-250_11 ORIGINAL REVISION DATED 1997-08-01.

CQR: 0266235.1 -Specification Limits

Temp	Dir	UTS	TYS	ELAD
		KSI	KSI	PCT
T6	Long Transv.	Max		
		Min	42.0	35.0
				10

Chemical Composition	SI	FE	CU	MN	MG	CR	ZN	TI	Other Each	Other Total	Aluminum
Alloy 6061	Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15
	Min	0.40		0.15		0.8	0.04				REMAIN

CERTIFIED INSPECTION REPORT

Arconic

DAVENPORT WORKS 4879 State Street Bettendorf, IA 52722

Ship From: RIVERDALE, IA.

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Per:

S. N...
Nanda Srinivasan
Manufacturing Director - Davenport & Satellite

Terence Thom
Terence Thom
Quality Assurance Manager

3707172 Ship Date	0 B.L. No.	Invoice No.	Arconic No.	Item
2019-02-08	11988480	00000	1001077092-1	DPE-77092-1
P.O. No./Govt Contract No.	Customer	Arconic	Item	
U11023 Ln#: 1			:01	GB8

Page 2 of 2

CQR: 0266235.1 -Specification Limits (cont.)

Lot: 569424 - Mechanical, Physical, Metallography, Quantometer Results

Temp	Dir	No->	UTS	TYS	ELAD
T6	Long Transv.	Test	KSI	KSI	PCT
		2	48.9	42.3	13.8
			48.3	41.8	13.7

Cast Number	Chemical	OES	SI	FE	CU	MN	MG	CR	ZN	TI	Other	Each	Other	Total
18P0701041	Actuals		0.66	0.5	0.23	0.07	1.0	0.17	0.01	0.06	< 0.05		< 0.15	

This material was melted in the United States or a Qualifying Country [REF DFARS 225.872.1(a)]; it was manufactured in the United States

CERTIFIED INSPECTION REPORT

Arconic

DAVENPORT WORKS 4879 State Street Bettendorf, IA 52722

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

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Per:

S. Nair

Nandu Srinivasan
Manufacturing Director - Davenport & Satellite

Terence Thom

Terence Thom
Quality Assurance Manager

3707172

0

Ship Date

B.L. No.

Invoice No.

Arconic No. Item

2019-02-08

11988480

00000

1001077092-1

DPE-77092-1

P.O. No./Govt Contract No.

Customer

Arconic Item

U11023 Ln#: 1

1

GB8

1: NO CERT MAIL INSTRUCTIONS SPECIFIED
BY CSSR

Line 4
M6061T6S.125

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: 6061-T6/T62 ALUMINUM SHEET OR PLATE

SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR 4027
OR ASTM B209 *um*

△ PART NUMBER: M6061T6S | .XXX | X | W.WWW |
THK | WIDTH |

WHERE ".XXX" = THICKNESS (IN INCHES)
AND "W.WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)

EG. 0.063" THICK SHEET = M6061T6S.063
EG. 3.5" WIDE BY 0.500" THICK PLATE = M6061T6S.500X3.500

△ PREFERRED SIZE: .XXX BY 4FT BY 8FT FOR SHEET

RELEASED

2018 MAR 13 *4*
E23 18-405

C	ADD PLATE AND T6S1 SPEC	ML	17.12.13
B	REFORMAT DWG, ADD B209 SPEC (ZN D8-1), REF PAR 08-020A	CP	09.07.13
A	NEW ISSUE	RF	01.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	ML	HAWKESBURY, ONTARIO, CANADA	
CHECKED	NO	DRAWING NO.	REV. C
MFG. APPR.	JFS	M6061T6S	SHEET 1 OF 1
APPROVED	HS	TITLE	SCALE
DE APPR.	CP <i>4</i>	6061-T6 SHEET/PLATE SPEC	NTS
DATE	17.12.13	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

APPROVED

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061765-125
 DATE: OCT 29 2019

PO / BATCH NO.: POHBOU4742/
5227403

MATERIAL CERT REC'D: Y
 QUANTITY RECEIVED: 64 SF
 QUANTITY INSPECTED: 64 SF
 QUANTITY REJECTED: -

THICKNESS ORDERED: .125"
 THICKNESS RECEIVED: .125"
 SHEET SIZE ORDERED: 4'x12'x2
 SHEET SIZE RECEIVED: 4'x12'x2

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y ☒ N	
CORRECT FINISH	☒ Y ☒ N	
CORROSION	Y ☒ N	
CORRECT GRAIN DIRECTION	☒ Y ☒ N	
CORRECT MATERIAL PER M-DRAWING	☒ Y ☒ N	ASTM B209
CORRECT THICKNESS	☒ Y ☒ N	
PHOTO REQUIRED	Y ☒ N	
CORRECT REF # TO LINK CERT	☒ Y ☒ N	HT: 569424
CORRECT MATERIAL IDENTIFICATION	☒ Y ☒ N	
CORRECT M# ON THE MATERIAL	☒ Y ☒ N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y ☒ N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y ☒ N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: _____ DATE: <u>OCT 29 2019</u>	DAS 81 9-89	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

CERTIFIED INSPECTION REPORT

Arconic

DAVENPORT WORKS 4879 State Street Bettendorf, IA 52722

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

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S. Nandur
Nandu Srinivasan
Manufacturing Director - Davenport & Satellite

Terrence Thom
Terrence Thom
Quality Assurance Manager

3866176 0
Ship Date B.L. No. Invoice No. Arconic No. Item
2019-09-13 12191230 00000 1001152034-1 DPE-52034-1
P.O. No./Govt Contract No. Customer Arconic Item
U11252 Ln#: 1 13R20 GB8

Page 1 of 2

Ship To:

Item Description
0.08 IN TK (+0.0000 -.0045) X 48.0 IN W (+.125 -.125) X 144.0 IN LN (+.15625 -.15625) CAT D 126901 (N) A/T 6061-
T6 FLAT SHEET FOR DISTRIBUTORS TOLERANCE
GUARANTEED. AMS4027 REV N ANS1H35.2 REV 2017 EXC_MRK ASME-SB-
209 REV 15 EXC_MRK ASTMB209 REV 14
((MARKED)) KRAFT PAPER INTERLEAVED
MAX GROSS SKID WGT: 4750 LB QUAN TOL +/-
25 % CQR D126901 REV 48 CUST REQ 19-09-
06 *** W/E 19-09-14 ***

Num	Package Ticket	Lot	Weight	Quantity	UOM	Inspector Clock Numbers
1	593330	400871 /	3900	75	PC	28075 47431

Notes for CQR: D126901.48

PRODUCT PRODUCED TO THE REQUIREMENTS OF AMS4027 REV N ALSO MEET THE REQUIREMENTS OF AMS-QQ-A-250_11 ORIGINAL REVISIO N DATED 1997-08-01.

CQR: D126901.48 -Specification Limits

Temp Dir	UTS KSI	TYS KSI	EL4D PCT
T6 Long Transv.	Max		
	Min 42.0	35.0	10

Chemical Composition	SI	FE	CU	MN	MG	CR	ZN	TI	Other Each	Other Total
Alloy 6061	Max 0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15
Lot: 400871	Min 0.40		0.15		0.8	0.04				

- Mechanical, Physical, Metallography, Quantometer Results

Temp Dir	Test	UTS KSI	TYS KSI	EL4D PCT
T6 Long Transv.	No-> 10	48.6	41.9	12.1

CERTIFIED INSPECTION REPORT

Arconic

DAVENPORT WORKS 4879 State Street Bettendorf, IA 52722

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

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Per:

S. Nandur
Nandu Srinivasan
Manufacturing Director - Davenport & Satellite

Terence Thom
Terence Thom
Quality Assurance Manager

3866176	0			
Ship Date	B.L. No.	Invoice No.	Arconic No.	Item
2019-09-13	12191230	00000	1001152034-1	DPE-52034-1
P.O. No./Govt Contract No.	Customer	Arconic	Item	
U11252 Ln#: 1				GB8

Page 2 of 2

Lot: 400871 - Mechanical, Physical, Metallography, Quantometer Results (cont.) -----

✓48.6	✓42	✓12.2
✓48.7	✓42.2	✓12.4
✓48.5	✓41.7	✓12.5
✓48.6	✓41.8	✓12.6
✓49.2	✓42.3	✓12.8
✓49	✓42.1	✓12.7
✓49	✓42	✓12.7
✓49.1	✓42.2	✓12.8
✓49.4	✓42.5	✓12.5



Cast Number	Chemical - OES	SI	✓	FE	✓	CU	✓	MN	✓	MG	✓	CR	✓	ZN	✓	TI	✓	Other	Each	Other	Total
H3600021	Actuals	0.62		0.4		0.21		0.06		1.0		0.16		0.02		0.02		< 0.05	✓	< 0.15	✓

This material was melted in the United States or a Qualifying Country [REF DFARS 225.872.1(a)]; it was manufactured in the United States

Line 5
M6061T6S.080

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE

SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR 4027
OR ASTM B209 *Um*

△ PART NUMBER: M6061T6S | .XXX | X | W.WWW
THK WIDTH

WHERE ".XXX" = THICKNESS (IN INCHES)
AND "W.WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)

EG. 0.063" THICK SHEET = M6061T6S.063
EG. 3.5" WIDE BY 0.500" THICK PLATE = M6061T6S.500X3.500

△ PREFERRED SIZE: .XXX BY 4FT BY 8FT FOR SHEET

RELEASED

2018 MAR 13
EWS 18-605 *4*

APPROVED

C	ADD PLATE AND T651 SPEC	ML	17.12.13
B	REFORMAT DWG, ADD B209 SPEC (ZN D8-1), REF PAR 08-020A	CP	09.07.13
A	NEW ISSUE	RF	01.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	ML	HAWKESBURY, ONTARIO, CANADA	
CHECKED	NO	DRAWING NO.	REV. C
MFG. APPR.	JFS	M6061T6S	SHEET 1 OF 1
APPROVED	HS	TITLE	SCALE
DE APPR.	CP <i>4</i>	6061-T6 SHEET/PLATE SPEC	NTS
DATE	17.12.13	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE FIRM'S CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061765-080

PO / BATCH NO.: P24B04742 / 5227404

DATE: OCT 29 2019

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 192 SF
 QUANTITY INSPECTED: 192 SF
 QUANTITY REJECTED: -

THICKNESS ORDERED: .08"
 THICKNESS RECEIVED: .08"
 SHEET SIZE ORDERED: 4'x8'x4
 SHEET SIZE RECEIVED: 4'x8'x4

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <u>(N)</u>	
CORRECT FINISH	<u>(Y)</u> N	
CORROSION	Y <u>(N)</u>	
CORRECT GRAIN DIRECTION	<u>(Y)</u> N	
CORRECT MATERIAL PER M-DRAWING	<u>(Y)</u> N	ASTM B209
CORRECT THICKNESS	<u>(Y)</u> N	
PHOTO REQUIRED	Y <u>(N)</u>	
CORRECT REF # TO LINK CERT	<u>(Y)</u> N	HT: 400871
CORRECT MATERIAL IDENTIFICATION	<u>(Y)</u> N	
CORRECT M# ON THE MATERIAL	<u>(Y)</u> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <u>(N)</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <u>(N)</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: _____ DATE: <u>OCT 29 2019</u>	 SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SO No., Item & Date.: 8076194 000060 2019/06/26	Shipment No. & Date.: 1000336021 2019/06/27	TC No., Date & Time : ASI-582192 2019/06/28 - 10:28:17													
Sold to Customer Name and Address :	Ship to Customer Name and Address:	Customer PO NO./Item: 48926 / 6 BOL NO.: 1000336021 Cust. Part No.: Carrier : LSI TRANSPORT INC - 823 A/B													
Customer Specification : HR STEEL SHEET Carbon CQ / CS ASTM A1011 CS TY B (2017) Top Semi Critical Surface Improved Shape Gauge type MIN - 0/+ 0.0060 " Coil break considered															
Supplementary Instructions : Test Cert 1: milltest@acierbouchard.com															
Insp T/R : Chemical Analysis		Cust Use : GENERAL MANUFACTURING													
ALGOMA STEEL INC. HEREBY CERTIFIES THAT THE MATERIAL HEREIN DESCRIBED WAS MADE AND TESTED IN ACCORDANCE WITH THE RULES OF THE SPECIFICATION SHOWN. ALL RESULTS ARE RETAINED IN ACCORDANCE WITH THE COMPANY'S STANDARD RECORD KEEPING PRACTICES. THIS MILL TEST REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF ALGOMA STEEL INC. IF YOU RECEIVE THIS DOCUMENT AND ARE NOT THE INTENDED RECEIVER, PLEASE CALL (705)945-4085 FOR INSTRUCTIONS ON METHOD OF DISPOSAL OF DOCUMENT. THIS TEST REPORT HAS BEEN GENERATED BY A COMPUTERIZED SYSTEM AND IS VALID WITHOUT A PHYSICAL SIGNATURE.															
MEETS EN 10204 3.1 ISO QUALITY AND ENVIRONMENTAL CERTIFICATES AVAILABLE AT WWW.ALGOMA.COM															
ALL HEATS FULLY KILLED. HEATS INDICATED WITH (*) FINE GRAINED. HEATS INDICATED WITH (**) Made in Canada for NAFTA duty preference and NAFTA marking purposes															
Dimensions (T x W x L) 0.0580 " x 48.000 "	Batch No. TCG6268	Heat No.-MS 0615G4-52													
		Quantity 43,770 LB													
		Pcs 1													
CHEMICAL PROPERTIES															
Heat No. (wt%)	C	Mn	P	S	Si	Cr	Ni	Cu	Mo	Al	Nb	V	B	Ti	N
0615G4*	0.05	0.27	0.007	0.006	0.022	0.02	0.02	0.04	0.00	0.034	0.000	0.000	0.0000	0.001	0.0055



 KASHIF REHMAN
 MANAGER METALLURGICAL SERVICES

****WARNING**** THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE (INCLUDING DESIGN OR CALCULATIONS) AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.

Line 6

MT-HRS-S-16GA

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
B	REMOVED LENGTH AND WIDTH DIMENSIONS	17-675	26/09/2017	SAC	WM

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL:

HOT ROLLED STEEL SHEET

SPECIFICATION:

ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018

PART NUMBER:

MT-HRS-S-[G]GA

WHERE G IS GAUGE THICKNESS

EXAMPLE:

MT-HRS-S-6GA

GAUGE THICKNESS REFERENCE:

GAUGE	NOM. THICK. (IN)	THICKNESS RANGE (IN)
4	0.2242	0.2332-0.2152
5	0.2092	0.2182-0.2002
6	0.1943	0.2033-0.1853
7	0.1793	0.1883-0.1703
8	0.1644	0.1734-0.1554
9	0.1495	0.1585-0.1405
10	0.1345	0.1405-0.1285
11	0.1196	0.1256-0.1136
12	0.1046	0.1106-0.0986
14	0.0747	0.0797-0.0697
16	0.0598	0.0648-0.0548
18	0.0478	0.0518-0.0438

DART AEROSPACE		Markham, Ontario, Canada	
TITLE HOT ROLLED STEEL SHEET			
DWG NO. MT-HRS-S		REV B	
DESIGN BY: SAC 07/09/2017	XXX ± .005 XX ± .01	FRACTIONS & 1/8 ANGLES & 1/8	
DRAWN BY: SAC 09/26/2017	X ± .1	SURFACES = 12	
CHECKED BY: VM 09/26/2017	1. DIMENSIONS ARE IN INCHES		
MFG. APPR: DP 09/26/2017	UNLESS OTHERWISE SPECIFIED		
APPROVED BY: WM 10/05/2017	2. INTERPRET DIM AND TOL PER		
DATE: 26/09/2017	ASME Y14.5-2009		
SCALE: NTS	WEIGHT: N/A	3. DIMENSIONAL LIMITS APPLY	
		AFTER PLATING	
SHEET 1 OF 1			
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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-HRS-5-16GA
DATE: OCT 29 2019

PO / BATCH NO.: POHBO44742/
5227405

MATERIAL CERT REC'D: Yes
QUANTITY RECEIVED: 32 sf
QUANTITY INSPECTED: 32 sf
QUANTITY REJECTED: -

THICKNESS ORDERED: .062"
THICKNESS RECEIVED: .062"
SHEET SIZE ORDERED: 1 x 4' x 8'
SHEET SIZE RECEIVED: 1 x 4' x 8'

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM B209
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HT: 061564-52
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: _____	DAS 81 9-89	SIGNED OFF BY: _____	
DATE: <u>OCT 29 2019</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

C18687



Mill Test Certificate

高雄市中區山仔頂五興路600號
NO. 600, ZONGJONG ST., JIASING TWP., GAOXUNG DIST.,
KAOHSIUNG CITY 80051, TAIWAN (R.O.C.)
TEL: 886-7-623 2250 FAX: 886-7-623 3144-1



客戶:
Customer

產品名稱: 冷轧不銹鋼鋼捲
Product

客戶編號:
Customer NO.

表面品質: No.2B
Surface Finish

品質號碼: B18207052
Certificate NO.

日期: JUL 26, 2018
Date

訂單號碼: D31821901
Order NO.

規格: ASTM A240-16 ASME
Spec SA 240

鋼種: S 30403
Grade

頁次: 1/1
Page

產品編號 Product ID		化學成份 Chemical Composition (%)												拉力試驗 Tensile Test				硬度試驗 Hardness Test		彎曲試驗 Bend Test	
		C	Si	Mn	P	S	Ni	Cr	N	Mo	Cu				Proof Stress N/mm²	Tensile Stress N/mm²	伸長率 Elong A50 %	HRB	HV10		
序號	Min.	0.030	0.75	2.00	0.045	0.030	12.00	18.50	0.100						170		485	40			
	Max.	0.022	0.40	1.35	0.028	0.002	8.03	18.16	0.063	0.03	0.01				304	343	674	58	87	180	
1	77588560A	0.022	0.40	1.35	0.028	0.002	8.03	18.16	0.063	0.03	0.01				304	343	674	58	87	180	
2	77588560B	0.022	0.40	1.35	0.028	0.002	8.03	18.16	0.063	0.03	0.01				304	343	674	58	87	180	
3																					
4																					
5																					
6																					
7																					
8																					
序號	產品編號 Product ID	爐號 Heat No.	尺寸 Dimension		數量 QTY	重量 Weight	附註 Remarks														
1	77588560A	LZ26SA08	1.20 mm * 1219 mm * Coil		1	10,290 kg	1 測試方法: 1.1 成分分析: C, S, P 依照 ASTM E1019-2011, 其它元素依照 ASTM E1098-2014 1.2 拉力試驗: ASTM E8/E8M-2016a 1.3 硬度試驗: 厚度 > 1.2mm 依照 ASTM E18-16, JN 依照 ASTM E140-07 換算, 厚度 ≤ 1.2mm 依照 ASTM E384-17, HRB 依照 ASTM E140-07 換算 2 本材料於製程中未經退火 3 經強化處理溫度約 1080°C 4 符合 ASTM A262 PRACTICE E														
2	77588560B	LZ26SA08	1.20 mm * 1219 mm * Coil		1	10,624 kg															
3																					
4																					
5																					
6																					
7																					
8																					

1. The material described above has been detected with low irradiation.
 2. YUCCO has established a QMS according to ISO 9001, which is certified by DNV CERT (reg.-no. 0008-2008-A0-ACC-RVN)
 3. Visual inspection (surface finish) and dimensional check: OK
 4. This certificate complies to 2. UDN EN 10204/2006
 5. The tests including "Chemical Composition", "Tensile Test", "Hardness Test", "Bend Test", "Intergranular Attack" (P.K. TEST 1) have been introduced by ABLA (TESTING CERT 00000000).

Subtotal 20,914 kg

品質處長 General Manager of Quality Control Dep.

張正文

P 844593 ~ P 844596

Line 7
M304S18GA

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SHEET
ANNEALED

SPECIFICATION: MIL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASTM A240
OR ASME SA240

FINISH:

FINISH
UNPOLISHED No. 1
UNPOLISHED No. 2D
UNPOLISHED No. 2B
POLISHED No. 3
POLISHED No. 4
BUFFED No. 6
BUFFED No. 7
BUFFED No. 8

DART M-NUMBER
IDENTIFIER
1P
2D
NONE
3P
4P
6P
7P
8P

PART NUMBER: M304S TT GA #P
GA

WHERE "TT" = GAUGE THICKNESS
WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET 2B FINISH = M304S16GA
EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE THICKNESS REFERENCE:

GAUGE	NOM. THICK. (IN)	THICKNESS RANGE (IN)
26	0.01875	0.0178 - 0.019
25	0.021875	0.0199 - 0.023
24	0.025	0.024 - 0.026
23	0.028125	0.027 - 0.029
22	0.03125	0.030 - 0.032
21	0.034375	0.033 - 0.035
20	0.0375	0.036 - 0.040
19	0.04375	0.041 - 0.046
18	0.050	0.047 - 0.052
17	0.05625	0.053 - 0.058
16	0.0625	0.059 - 0.065
15	0.0703125	0.066 - 0.072
14	0.078125	0.073 - 0.083
13	0.09375	0.084 - 0.098
12	0.109375	0.099 - 0.114
11	0.125	0.115 - 0.130
10	0.140625	0.131 - 0.145
9	0.15625	0.146 - 0.160
8	0.171875	0.161 - 0.176
7	0.1875	0.182 - 0.194
6	0.2031	0.194 - 0.212
5	0.2188	0.201 - 0.228
4	0.2344	0.225 - 0.243
3	0.2500	0.238 - 0.262
2	0.2656	0.254 - 0.278
1	0.2813	0.269 - 0.293
0	0.3125	0.301 - 0.325

RELEASED

2015 FEB 04

ECN 15-522 47

D	ADDED GAUGES 0-7.	AJS	15.01.06
C	DEFINED FINISH OPTION (ZN C8) AND EXAMPLE OF MATERIAL P/N WITH FINISH OTHER THAN 2B (ZN B5).	MB	12.09.20
B	REFORMAT DWG, ADD ASTM/ASME SPECS (ZN D8-1), ADD GAUGE REF (C8-1), REF PAR 06-020A	CP	09.06.01
A	NEW ISSUE	DS	01.09.24
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		M304S	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		304/316 SS SHEET	NTS
DATE	15.01.06	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION OF DART AEROSPACE LTD.	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304S18GA
 DATE: OCT 29 2019

PO / BATCH NO.: POU1B044 ⁷⁴²
5227406

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 160 sf
 QUANTITY INSPECTED: 160 sf
 QUANTITY REJECTED: _____

THICKNESS ORDERED: .048"
 THICKNESS RECEIVED: .048"
 SHEET SIZE ORDERED: 5x4'x8'
 SHEET SIZE RECEIVED: 5x4'x8'

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <u>(N)</u>	
CORRECT FINISH	<u>(Y)</u> N	
CORROSION	Y <u>(N)</u>	
CORRECT GRAIN DIRECTION	<u>(Y)</u> N	
CORRECT MATERIAL PER M-DRAWING	<u>(Y)</u> N	ASTM A240
CORRECT THICKNESS	<u>(Y)</u> N	
PHOTO REQUIRED	Y <u>(N)</u>	
CORRECT REF # TO LINK CERT	<u>(Y)</u> N	HT: L2265A08
CORRECT MATERIAL IDENTIFICATION	<u>(Y)</u> N	
CORRECT M# ON THE MATERIAL	<u>(Y)</u> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <u>(N)</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <u>(N)</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: _____	DAS 81 9-89	SIGNED OFF BY: _____
DATE: <u>OCT 29 2019</u>		DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 01 of 02

Certification Date
4-MAR-2019

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

46477-J

Invoice Number
T389669

PART NUMBER/NUMÉRO DE PIÈCE

525194

SOLD TO: METAUX SOLUTIONS INC.
VENDU À:

SHIP TO:
EXPÉDIÉ À:

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 304/304L HR ANN BAR ASTM A479
1/4 X 1/2 FLAT X 12' R/L
HEAT: 56161555

ITEM: 525194

Line Total: 996 LB

Specifications:

ASTM A276 17

ASTM A479 17

ASME SA479 17

QQ S 763 F

AMS 5639 J

AMS 5647 K

AMS QQ S 763 D

ASTM A484 16

CHEMICAL ANALYSIS

C	SI	MN	P	S	CR	NI	MO
0.022	0.27	1.90	0.033	0.027	18.20	8.15	0.28
CO	CU	N	TI	AL			
0.14	0.459	0.078	0.003	0.006			

RCPT: R483583

COUNTRY OF ORIGIN : UK

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
	KSI	KSI	IN 02 IN	IN AREA	BHN
	49.0	93.0	52.9	69.9	195

GRAIN SIZE : 9 -

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JAMES MURPHY

MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date
4-MAR-2019

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

46477-J

PART NUMBER/NUMÉRO DE PIÈCE

525194

Invoice Number
T389669

SOLD TO: METAUX SOLUTIONS INC.
VENDU À:

SHIP TO:
EXPÉDIÉ À:

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7

METAUX SOLUTIONS (RIVE-SUD)

2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1

Description: 304/304L HR ANN BAR ASTM A479
1/4 X 1/2 FLAT X 12' R/L
HEAT: 56161555

ITEM: 525194

Line Total: 996 LB

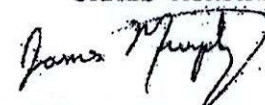
MATERIAL IS FREE FROM MERCURY CONTAMINATION
NO WELD REPAIR PERFORMED ON MATERIAL
CORROSION: OK

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JAMES MURPHY



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

Line 8

M304B0.250X0.500

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE
(NOTE: A16 303 NOT ACCEPTABLE)

△ SPECIFICATION: ASTM A276 OR ASTM A240

PART NUMBER: M304B | T.TTT | X | WW.WWW |
THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES
AND "WW.WWW" = WIDTH IN INCHES

△ EG. 0.5" x 3.0" BAR = M304B0.500X03.000
EG. 0.5" X 12.0" PLATE = M304B0.500X12.000

RELEASED
2010-11-30

C	ADDED PLATE TO PURCHASE MATERIAL, ADDED PLATE RELATED SPECIFICATIONS, AND EG.: CHANGED TITLE FROM "304/316 BAR" TO "304/316 BAR/PLATE"	MB	10.11.25
B	REFORMAT DWG. ADD SPECS (ZN D6-1), REF PAR 08-020A	CP	09.07.15
A	NEW ISSUE	PH	05.08.10
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		M304B	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		304/316 BAR/PLATE	NTS
DATE	10.11.25	COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE, OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT DART AEROSPACE LTD'S PERMISSION	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M30480.250x0.500
 DATE: OCT 29 2019

PO / BATCH NO.: 044742/
5227407

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 200 sf
 QUANTITY INSPECTED: 200 sf
 QUANTITY REJECTED: -

THICKNESS ORDERED: .25"
 THICKNESS RECEIVED: .25"
 SHEET SIZE ORDERED: -
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y ☒ N	
CORRECT FINISH	Y ☒ N	
CORROSION	Y ☒ N	
CORRECT GRAIN DIRECTION	Y ☒ N	
CORRECT MATERIAL PER M-DRAWING	Y ☒ N	ASTM A276
CORRECT THICKNESS	Y ☒ N	
PHOTO REQUIRED	Y ☒ N	
CORRECT REF # TO LINK CERT	Y ☒ N	HT: 56161555
CORRECT MATERIAL IDENTIFICATION	Y ☒ N	
CORRECT M# ON THE MATERIAL	Y ☒ N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y ☒ N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y ☒ N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: _____ DATE: <u>OCT 29 2019</u>	DAS 81 9-89	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in